Amendments to the Claims

1. (Currently amended): A method for delivering a physiologically active compound to a patient comprising the steps of:

(a) coating onto a substrate ~~heating the~~ a physiologically active compound that when heated in the absence of gas flow detectably decomposes ~~to a temperature and for a duration that results in an acceptably low level of decomposition;~~

(b) placing the substrate in an airway, wherein the airway has a cross-sectional area such that for volumetric gas flows through the airway of 10 – 120 liter per minute, gas speed over the compound is sufficient to decrease the decomposition of the compound upon heating; ~~simultaneously passing a gas across the surface of said compound to achieve a desired rate of vaporization; and~~

(c) establishing a gas flow through the airway;

(d) heating the substrate, thereby heating the compound to form a vapor;

(e) allowing the vapor to mix into the gas flow, thereby cooling the vapor;

(f) allowing the cooled vapor to condense to form an aerosol, wherein the aerosol has a lower fraction of decomposition than when the compound is vaporized in the absence of gas flow; and

(g) administering the resulting aerosol to a patient.

2. (Original): The method of claim 1 wherein said gas is air.

3. (Original): The method of claim 2 wherein said air is at ambient temperature.

4. (Currently amended): The method of claim 2 wherein the coating thickness is less than 10 μm. ~~air is passed across said surface at a rapid rate.~~

5. (Currently amended): The method of claim 4 wherein the aerosol has a mass median aerodynamic diameter of between 1 – 3 μm. ~~the rapid rate does not result in a large rise in the air temperature.~~

6. (Currently amended): The method of claim ~~4~~ 1 wherein the physiologically active compound detectably decomposes when heated in the absence of gas flow to a temperature that substantially vaporizes the compound over a 2 second time period. ~~rapid rate does not result in said compound being blown downstream with the air without being first vaporized.~~

7. (Currently amended): The method of claim 2 wherein the heating of the compound to form a vapor occurs over a period of 2 seconds or less. ~~the vaporized compound is rapidly mixed into the air to cool and preclude additional decomposition of said compound.~~

8. (Currently amended): The method of claim 2 ~~7~~ wherein ~~the resulting mixture of~~ said

~~vaporized compound and air~~ cooled vapor mixed into air to form an aerosol is further mixed into an additional air stream to further cool ~~and preclude additional decomposition of~~ said aerosol ~~compound~~.

9. (Currently amended): The method of claim 1 ~~4~~ wherein the establishing a gas flow through the airway ~~rapid rate of air passing across said surface~~ is caused by inhalation through the device by the patient.

10. (Currently amended): The method of claim 1 ~~2~~ wherein the establishing a gas flow through the airway ~~air passing across said surface~~ is ~~generated~~ caused by ~~mechanical means~~ differences in pressure.

11. (Currently amended): The method of claim 1 wherein said ~~compound~~ aerosol is administered via inhalation through a mouthpiece ~~moved into a region of rapid gas movement and heated so that the said compound vaporizes at the lowest possible temperature~~.

12. (Currently amended): The method of claim 1 wherein said compound is selected from the group consisting of cannabinoid extracts from cannabis, THC, ketorolac, fentanyl, morphine, testosterone, ibuprofen, ~~nicotine,~~ Vitamin A, Vitamin E acetate, Vitamin E, nitroglycerin, pilocarpine, mescaline, testosterone enanthate, ~~menthol,~~ phencaramide, methsuximide, eptastigmine, promethazine, procaine, retinol, lidocaine, trimeprazine, isosorbide dinitrate, timolol, methyprylon, etamiphyllin, propoxyphene, salmetrol, vitamin E succinate, methadone, oxprenolol, isoproterenol bitartrate, etaqualone, Vitamin D3, ethambutol, ritodrine, omoconazole, ~~cocaine,~~ lomustine, ketamine, ketoprofen, cilazaprol, propranolol, sufentanil, metaproterenol, pentoxapylline, captopril, loxapine, cyproheptidine, carvediol, trihexylphenadine, alprostadil, melatonin, testosterone proprionate, valproic acid, acebutolol, terbutaline, diazepam, topiramate, pentobarbital, alfentanil HCl, papaverine, nicergoline, fluconazole, zafirlukast, codeine, testosterone acetate, droperidol, atenolol, metoclopramide, enalapril, albuterol, ketotifen, isoproterenol, amiodarone HCl, zileuton, midazolam, oxycodone, cilostazol, propofol, nabilone, ketorolac, gabapentin, famotidine, lorezepam, naltrexone, acetaminophen, sumatriptan, bitolterol, nifedipine, phenobarbital, phentolamine, 13-cis retinoic acid, droprenilamine HCl, amlodipine, caffeine, zopiclone, tramadol HCl, pirbuterol, naloxone, meperidine HCl, trimethobenzamide, nalmefene, scopolamine, sildenafil, carbamazepine, procaterol HCl, methysergide, glutathione, olanzapine, zolpidem, levorphanol, buspirone and mixtures thereof.

13. (Original): The method of claim 12 wherein said gas is air.

14. (Canceled).

15. (Canceled).

16. (Currently amended): The method of claim 1 wherein said substrate ~~compound~~ is heated with photon energy.

17. (Currently amended): The method of claim 1 wherein said substrate ~~compound~~ is resistively heated with electrical energy ~~resistive heaters~~.

18. (Currently amended): The method of claim 1 wherein said substrate ~~compound~~ is inductively heated with electrical energy ~~by inductive means~~.

19. (Currently amended): A method for delivering a physiologically active compound to a patient comprising the steps of:

(a) heating the physiologically active compound to a temperature ~~and for a duration~~ that results in ~~an acceptably a low level of decomposition~~ substantial vaporization of the compound over a period of less than 2 seconds;

(b) simultaneously passing a gas across the surface of said compound, said compound being contained in a heating-vaporization-mixing zone having a sufficiently restricted cross-sectional area to increase the rate of gas passing across said compound and to achieve a ~~desired~~ lower level of decomposition than occurs upon vaporization of a similar quantity of the compound at a similar temperature in the absence of gas passing across the compound ~~rate of vaporization~~;

(c) rapidly mixing the vaporized compound into the gas to cool ~~and preclude additional decomposition of~~ said compound to form an aerosol; and

(d) administering the resulting aerosol to a patient.

20. (Original): The method of claim 19 wherein said gas is air.

21. (Original): The method of claim 20 wherein said air is at ambient temperature.

22. (Currently amended): The method of claim ~~19~~ 20 wherein the ~~rapid rate of air~~ passing air across said surface is caused by the inhalation of the patient.

23. (Canceled).

24. (Canceled).

25. (Canceled).

26. (Canceled).

27. (Canceled).

28. (Canceled).

29. (Currently amended): The method of claim 19 ~~24~~ wherein said compound is heated with photon energy.

30. (Currently amended): The method of claim 19 ~~24~~ wherein said compound is resistively heated with electrical energy ~~resistive heaters~~.

31. (Currently amended): The method of claim 19 ~~24~~ wherein said compound is inductively heated with electrical energy ~~by inductive means~~.

32. (Currently amended): The method of claim 19 ~~31~~ wherein said compound is coated onto a substrate prior to heating. ~~is a metallic foil.~~

33. (Original): The method of claim 32 wherein said substrate is a stainless steel foil.

34. (Original): The method of claim 33 wherein said compound is deposited onto said stainless steel foil at a thickness of no greater than about 10 microns.

35. (Canceled).

36. (Canceled).

37. (Canceled).

38. (Canceled).

39. (Canceled).

40. (Canceled).

41. (Canceled).

42. (Canceled).

43. (Currently amended): The method of claim 1 ~~42~~ wherein the substrate is heated by making the substrate from an electrically conductive material and passing an electrical current though the substrate.

44. (Canceled).

45. (Currently amended): The method of claim 1 ~~42~~ wherein the substrate is made of an electrically conductive material and is heated inductively.

46. (Canceled).

47. (Canceled).

48. (Canceled).

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76. (Canceled).

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78. (Canceled).

79. (Canceled).

80. (Canceled).

81. (Currently amended): The method of claim 1 ~~80~~ wherein the aerosol is administered to the eye.

82. (Currently amended): The method of claim 1 ~~80~~ wherein the aerosol is administered to the skin.

83. (Currently amended): The method of claim 1 ~~80~~ wherein the aerosol is administered to the mucosa.